

a colour from the remainder. Æther receives from the root a yellowish colour, and when evaporated, leaves the resin nearly pure. In this state it is moderately adhesive, of a deep orange colour, bitter and acrid, diffusible, but not soluble in water. The resin may also be precipitated in small quantities from alcohol by water.

2. A bitter principle. Both water and alcohol acquire a strong bitter taste when digested on the root. From both these solutions a copious precipitate is thrown down by the nitrate of silver and the acetite of lead. Muriate of tin gradually renders the solution turbid, but without a precipitate. Oxymuriatic acid renders the alcoholic solution turbid, but produces no change in the watery solution for some time. At length a precipitate forms and slowly subsides; but produces no change in the watery solution. No precipitate was formed from the cold aqueous infusion in an hour by the sulphuric or nitric acids, by lime water, nitrate of mercury, muriate of barytes, oxalate of ammonia, sulphate of iron, gelatine or hydro-sulphuret of potash. After standing twenty four hours, a very slight precipitate was discovered from the lime water and nitrate of mercury only.

3. An acrid principle. The acrimony resides in part in the resin, but is also communicated to

water. It is diminished by heat, yet it does not come over with water in distillation.

4. Fæcula. The infusion of the root in cold water is limpid. The hot infusion is viscid and glutinous and stiffens linen. From this solution the fæcula is precipitated in a white powder by alcohol. Nitric acid dissolves this precipitate, which may be again thrown down by alcohol.

5. A fibrous or woody portion.

The beautiful colour of the root seems to reside more in the resin than in any other principle, since the alcoholic solution has always more than twice as much colour as the aqueous. Papers dipt in these solutions receive a bright salmon colour from the tincture, but a very faint one from the aqueous infusion. This circumstance furnishes an impediment to the use of this article in dyeing.

The medical properties of the Sanguinaria are those of an acrid narcotic. When taken in a large dose it irritates the fauces, leaving an impression in the throat for considerable time after it is swallowed. It occasions heartburn, nausea, faintness, and frequently vertigo and diminished vision. At length it vomits, but in this operation it is less certain than other emetics in common use. The above effects are produced by a dose of from eight to twenty grains of the fresh powdered root.